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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,672

10/29/2003

Dan Li

INTEL/18112

8400

34431 7590 03/01/2007  
HANLEY, FLIGHT & ZIMMERMAN, LLC  
150 S. WACKER DRIVE  
SUITE 2100  
CHICAGO, IL 60606

EXAMINER

SHIH, HAOSHIAN

ART UNIT

PAPER NUMBER

2173

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/01/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/697,672

Applicant(s)

LI ET AL.

Examiner

Haoshian Shih

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/29/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20070226</u> | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The office action is in response to the applicant application filed on 10/29/2003
2. Claims 1- 30 are pending in this application and have been examined.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. As to claim 1, it is not clear whether the "first communication link" refers to the coupling between the base components and the screen (lines 4), or the transmission of signals from the pointer to the base components (lines 2-3).

5. Claims 10, 17, and 24 are similar in the scope of claim 1, and are rejected under same rational.

#### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

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351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**7. Claims 1-30 are rejected under 35 U.S.C. 102(e) as being anticipated by Moyne et al. (Moyne, US 7,109,979 B2).**

8. As to **independent** claim 1, Moyne discloses a method to provide a handheld pointer-based user interface comprising: transmitting one or more human-computer interaction (HCI) signals associated with an HCI event from a wireless pointer component to one or more base components operatively coupled to a screen of a display via a first communication link (col.1, lines 30-37; col.1, lines 49-54; "first signal transmitter", a wireless styles for recording a writing performed on a surface is presented); generating at least one of operating information and position information of the wireless pointer component based on the one or more HCI signals (col.1, lines 45-47; "position signals"); and transmitting the at least one of operating information and position information from the one or more base components to a processor configured to generate screen information on the screen of the display via a second communication link (col.1, lines 39-43; col.1, lines 49-51; "second signal transmitter" ).

9. As to **independent** claim 10, Moyne discloses a machine readable medium storing instructions, which when executed, cause a machine to: transmit one or more human-computer interaction (HCI) signals associated with an HCI event from a wireless pointer component to one or more base components operatively coupled to a screen of a display via a first communication link (col.1, lines 30-37; col.1, lines 49-54; "first

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signal transmitter", a wireless styles for recording a writing performed on a surface is presented); generate at least one of operating information and position information of the wireless pointer component based on the one or more HCI signals (col.1, lines 45-47; "position signals"); and transmit the at least one of operating information and position information from the one or more base components to a processor configured to generate screen information on the screen of the display via a Second communication link (col.1, lines 39-43; col.1, lines 49-51; "second signal transmitter" ).

10. As to **independent** 17, Moyne discloses an apparatus to provide a handheld pointer based user interface comprising: a wireless pointer component configured to transmit one or more human-computer interaction (HCI) signals associated with an HCI event via a first communication link (col.1, lines 30-37; col.1, lines 49-54; "first signal transmitter", a wireless styles for recording a writing performed on a surface is presented); and one or more base components operatively coupled to a screen of a display to receive the one or more HCI signals from the wireless pointer component via the first communication link the one or more base components being configured to generate at least one of operating information and position information of the wireless pointer component based on the one or more HCI signals (col.7, lines 46-52, "detector assembly"), and to transmit the at least one of operating information and position information to a processor configured to generate screen information on the screen of the display via a second communication link (col.1, lines 39-43; col.1, lines 49-51; "second signal transmitter").

11. As to **independent** claim 24, Moyne discloses a processor system to provide a handheld pointer-based user interface comprising: a display having a screen configured to generate at least one of text and graphics (col.1, lines 49-51, col.5, lines 16-18); a processor operatively coupled to the display to generate screen information on the screen of the display (col.1, lines 49-54); And a handheld pointer-based user interface device having a wireless pointer component configured to transmitting one or more human-computer interaction (HCI) signals associated with an HCI event via a first communication link (col.1, lines 30-37; col.1, lines 49-54; "first signal transmitter", a wireless styles for recording a writing performed on a surface is presented), and one or more components operatively coupled to the screen of the display to receive the one or more HCI signals from the wireless pointer component via the first communication link and configured to generate at least one of operating information and position information of the wireless pointer component based on the one or more HCI signals (col.7, lines 46-52, "detector assembly"), and to transmit the at least one of operating information and position information from the one or more base components to the processor via a second communication link (col.1, lines 39-43; col.1, lines 49-51; "second signal transmitter").

12. As to claims 2 and 11, Moyne discloses transmitting at least one of an ultrasonic signal and a radio frequency signal associated with the HCI event from the wireless pointer component to the one or more base components operatively coupled to the

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screen of the display via the first communication link (col.1, lines 39-47; "ultrasound signal").

13. As to claims 3 and 12, Moyne discloses transmitting the one or more HCI signals associated with at least one of writing, drawing, selecting, and scrolling directly on the screen of the display with the wireless pointer component by a user (col.5, lines 29-50).

14. As to claims 4 and 13, Moyne discloses transmitting the one or more HCI signals associated with the HCI event from the wireless pointer component to the one or more base components operatively coupled to a screen of a display associated with at least one of a desktop computer, a laptop computer, and a handheld computer (col.1, lines 49-54).

15. As to claims 5 and 14, Moyne discloses transmitting the one or more HCI signals associated with the HCI event from the wireless pointer component to the one or more base components (fig.6, "110", stylus sends positional signal, "118" base component process said positional signal) in response to at least one of pressing a tip of the wireless pointer component on the screen of the display, and pressing a button of the wireless pointer component (col.6, lines 40-45; the tip of the eraser is pressed against the writing surface to send an erasing signal).

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16. As to claim 6, Moyne discloses transmitting the at least one of operating information and position information from the one or more base components to the processor via one or more communication links operating in accordance with at least one of an 802.11-based communication protocol, a Bluetooth-based communication protocol, and an infrared-based communication protocol (col.13, lines 65-col.14 lines 2).

17. As to claims 7 and 15, Moyne discloses converting the at least one of operating information and position information from a first format to a second format based on configuration information associated with at least one of the one or more base components and the screen of the display (col.1, lines 46-48).

18. As to claims 8 and 16, Moyne discloses generating one or more coordinates of the wireless pointer component relative to the screen of the display based on the at least one of operating information and position information (col.3, lines 65- col.4 lines 3; calculation of the coordinates or position are standard steps in any pointing device).

19. As to claim 9, Moyne discloses operatively coupling the one or more base components on one or more sides of the display to receive the one or more HCI signals associated with the HCI event (col.2, lines 21-23, attachment mechanism"; col.2, lines 30-33, "active display"; col.7, lines 38-40; the base device can be anywhere as long as the base component can receive HCI signals).



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20. As to claims 18 and 25, Moyne discloses wherein the HCI event comprises at least one of writing, drawing, selecting, and scrolling directly on the screen of the display with the wireless pointer component by a user (col.5, lines 29-50).

21. As to claims 19 and 26, Moyne discloses wherein the wireless pointer component comprises at least one of a stylus and an electronic pen (col.1, lines 30-31).

22. As to claims 20 and 27 are similar to claims 8 and 16, and are rejected under the same rational.

23. As to claims 21 and 28 are similar to claims 4 and 13, and are rejected under the same rational.

24. As to claims 22 and 29, Moyne discloses the display comprises at least one of a cathode ray tube (CRT) display, a liquid crystal display (LCD), a light-emitting diode (LED) display, and a plasma display (col.1, lines 50-54; the use of common display types are well known in the art).

25. As to claims 23 and 30 are similar to claim 6, and are rejected under on the same rational.

### **Conclusion**

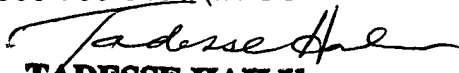
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26. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. 1.111(c) to consider these references fully when responding to this action. The documents cited therein teaches wireless communication of stylus and the base unit and coordinate/signal determination.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haoshian Shih whose telephone number is (571) 270-1257. The examiner can normally be reached on m-f 0730-1700.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571)272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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**TADESSE HAILU**  
Patent Examiner